

ACCESSION NR: AT6029924

8/30/87/62/001/000/0123/0131

AUTHOR: Belorossova, A. G.; Tsaylingol'd, T. A.; Epshteyn, V. G.; Angert, L. G.

TITLE: Phenyl- $\beta$ -naphthylamine derivatives as caoutchouc and rubber stabilizers

SOURCE: Yaroslavl'. Tekhnologicheskiy institut. Khimiya i khimicheskaya tekhnologiya, vol. 1 (8), 1962, 129-131

TOPIC TAGS: caoutchouc, rubber, phenyl, alkylation, phenyl derivative, amine, neozone-D,

ABSTRACT: The authors obtained alkylated derivatives of phenyl- $\beta$ -naphthylamine which contain different quantities of carbon atoms in the alkyl group. A description of various derivatives is given. Secondary amine derivatives of phenyl- $\beta$ -naphthylamine were obtained and identified; part of them have not been described in literature. The obtained products were tested as anti-oxidants and age resistors of caoutchouc and rubbers. It was shown that the tested products were anti-oxidants. In their protective effect against rubber aging, they were quite close to one another and similar to neozone-D. The best results, as an oxidation inhibitor and a substance which prevents heat aging, were shown by isopropyl-phenyl- $\beta$ -naphthylamine which exceeded the currently used neozone-D in the indicated properties. Orig. art.

Card 1/2

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has: 3 figures.

ASSOCIATION: none

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OTHER: 001

BELOROSSOVA, A.G.; TSAYLINGOL'D, T.A.; EPSHTEYN, V.G.; ANGERT, L.G.

Derivatives of phenyl-beta-naphtylamine as stabilizers of  
caoutchouk and rubber. Khim. i khim. tekhn. l:123-130 '62.

(MIRA 17:2)

BELOROSSOVA, N. V.

Cand Agr Sci - (diss) "Clonal selection of hops. Paper on public studies presented in competition." Moscow, 1961. 24 pp; (Moscow Order of Lenin Agricultural Academy imeni K. A. Timiryazev); 200 copies; price not given; (KL, 6-61 sup, 230)

BELOROSSOVA, O. N.

The isopropyl ester of benzenephosphonic acid, A. E. Arshavskij, G. I. L'vov, and V. S. Belorossova, *Zh. Org. Khim.*, 1, 1009 (1955); *J. Russ. Chem. Soc.*, 11, 15, 567-9 (1915). When I, in  $\text{PrOH}$  and  $\text{PhMe}$  in (1:1:1) are cooled and treated with  $\text{PhPCl}_2$  in  $\text{CHCl}_3$ , they form a distillate, 60% of which is  $d_4^{25} 1.0403$ ,  $d_5^{25} 0.9942$ , m.p. 150.1, and  $137.7^\circ$  (*rac*-*D,L*-*phenylisopropylphosphonate*)  $\text{CH}_3\text{NO}_2$ ,  $d_4^{25} 1.037$ ,  $d_5^{25} 1.0057$ ,  $d_6^{25} 1.0843$ ,  $n_D^{25} 1.4929$ , formed by ring contraction of I. When I is heated to  $150^\circ$  in the presence of *rac*-Ph (III) it liberates  $\text{MeCH}_2\text{CH}_3$  and forms *phenylisopropylphosphonic acid*, m. 61-2%, which gives crystalline I,  $\text{Cr}_2\text{O}_3$ , and I salt. When I and III are allowed to react in  $\text{PrOH}$  at room temp., 11.1% conversion to II occurs. Addition of a little  $\text{PhNM}_2$  increases the conversion to 62%.

H. M. Lester

• BELOROSSOV A. O.N.

CA

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**Esters of cacodyliphosphonic acid.** G. Kamal and O. N. Belorossova, *Bull. Acad. sci. U.R.S.S., Classe sci. chim.* 1947, 101-6. By using an Arbuzov reaction a no. of cacodyliphosphonic acid esters were prep'd. in good yields. To 115 cc. 10 N NaOH and 150 cc. 90% EtOH was added 100 g. EtAsI, followed by 20 g. BuHr, and the mixt. was boiled 8 hrs. to give 70.3 g. EtBu*i*AsI, b.p. 107-8°, b.d. 112-13°, d<sub>4</sub><sup>20</sup> 1.7196, d<sub>4</sub><sup>25</sup> 1.0818. Similarly, 80 g. iso-AmBr and 100 g. EtAsI gave 70.7% iso-*Am*EtAsI, b.p. 118-19°, d<sub>4</sub><sup>25</sup> 1.8151, d<sub>4</sub><sup>20</sup> 1.7807. PhAs(OH)<sub>2</sub> (75 g.) with 70 g. BuHr in alc. NaOH gave 75% PhBu*i*AsI, b.p. 147-8°, d<sub>4</sub><sup>25</sup> 1.3900, d<sub>4</sub><sup>20</sup> 1.3002; similarly, 47 g. allyl bromide and 60 g. PhAs(OH) in alc. NaOH gave 60% Ph(C<sub>2</sub>H<sub>5</sub>)<sub>2</sub>AsBr, b.p. 138-9°, d<sub>4</sub><sup>25</sup> 1.4912, d<sub>4</sub><sup>20</sup> 1.4730. From 20 g. EtBuAsI and 11.5 g. (EtO)<sub>2</sub>P after standing overnight was obtained 100% [EtBu*i*As(P(OEt)<sub>2</sub>)]I, m.p. 182.3° (from EtOH-Et<sub>2</sub>O).

which results from addn. of EtI to the primary reaction product, EtBuAsPO(OEt)<sub>2</sub>. To (EtO)<sub>2</sub>PONa (from 1.50 g. Na and 9.6 g. (EtO)<sub>2</sub>POH) in 100 cc. cold Et<sub>2</sub>O was added 20 g. EtBuAsI and the mixt. was boiled 3 hrs., filtered, and distd. to give EtBu*i*AsPO(OEt)<sub>2</sub>, b.p. 112-13°, d<sub>4</sub><sup>25</sup> 1.2054, d<sub>4</sub><sup>20</sup> 1.1855. Similarly, iso-Am*i*AsI gave 52% iso-AmEtAsPO(OEt)<sub>2</sub>, b.p. 118-20°, d<sub>4</sub><sup>25</sup> 1.2658, d<sub>4</sub><sup>20</sup> 1.2718 (use of the K-deny gave but 43% yield). EtPhAsI gave EtPh*i*AsPO(OEt)<sub>2</sub>, b.p. 144-5°, d<sub>4</sub><sup>25</sup> 1.2909, d<sub>4</sub><sup>20</sup> 1.2744. Ph(CH<sub>2</sub>:CHCH<sub>2</sub>)AsI with either (EtO)<sub>2</sub>P or (EtO)<sub>2</sub>PONa gave Ph(CH<sub>2</sub>:CHCH<sub>2</sub>)<sub>2</sub>AsPO(OEt)<sub>2</sub>, b.p. 142-3°, d<sub>4</sub><sup>25</sup> 1.2508. Ph<sub>2</sub>AsCl and (EtO)<sub>2</sub>PONa gave Ph<sub>2</sub>AsPO(OEt)<sub>2</sub>, b.p. 170-7°, d<sub>4</sub><sup>25</sup> 1.2971, d<sub>4</sub><sup>20</sup> 1.2845. BuPhAsBr gave BuPh*i*AsPO(OEt)<sub>2</sub>, b.p. 162-3°, d<sub>4</sub><sup>25</sup> 1.2411, d<sub>4</sub><sup>20</sup> 1.2345. The compds. on heating to 150° with 15% HCl broke down completely, showing rather poor stability of the P-As bond.

G. M. Kosolapoff

BELOROSSOVA, O.N.

A

**Notes on cacodylphosphonic acid. II** G. Kamal and  
 O. N. Belorossova, Arznei-Chem. Inst., Karan.  
*Inzr.-Akad. Nauk A.S.S.R., Akad. Nauk. Nauk 1950*  
 198 202; cf. *J.A. 42*, 1430. - Compds. of the type  $R_2AsP(O)(OR)_2$  prep'd. from halotinines and  $(RO)_2PONa$  are liquids distillable or m.p.s. which possess a cacodylic odor and suffer degradation to alkyl halides,  $H_2PO_2$ , and secondary arsine oxides on hydrolysis with HCl. Standing in air results in cleavage of the As-P link, apparently with formation of  $(R_2As)_2O$  and  $(RO)_2PO(O)PO(OR)_2$ ; the lower members are particularly sensitive to such oxidation. Addn. of 100.5 g. Et<sub>2</sub>AsI to 115 ml. 10 N NaOH and 150 ml. 95% EtOH, followed by addn. of 31 g. iso-BuBr and refluxing 6 hrs. gave 69.8% *E*(iso-Bu)<sub>2</sub>AsI, b.p. 103.4°, d<sub>4</sub><sup>20</sup> 1.7417, d<sub>4</sub><sup>25</sup> 1.7620. This (28 g.) refluxed 2 hrs. with (BuO)<sub>2</sub>PONa (from 2.08 g. Na and 17.6 g. (BuO)<sub>2</sub>POH in Et<sub>2</sub>O) and the NaI filtered off gave 54% iso-Bu-Et<sub>2</sub>AsP(O)(OBu)<sub>2</sub>, b.p. 138.5-40°, d<sub>4</sub><sup>20</sup> 1.1238, d<sub>4</sub><sup>25</sup> 1.1087, n<sub>D</sub><sup>20</sup> 1.4738. (BuO)<sub>2</sub>PONa (from 3.2 g. Na and 28.6 g. (BuO)<sub>2</sub>POH in Et<sub>2</sub>O) with 31 g. MeEtAsI similarly gave 50% MeEt<sub>2</sub>AsP(O)(OBu)<sub>2</sub>, b.p. 127.8°, d<sub>4</sub><sup>20</sup> 1.0884, d<sub>4</sub><sup>25</sup> 1.0710 (air oxidation yields  $(EtMeAs)_2O$ ); bubbling of air for 5 hrs. through the substance gave a liquid, b.p. 73.4°,

and an undistillable residue of  $(MeEtAs)_2O$ . Woggon, *C.A.* **24**, 3986. Similarly, iso-Bu<sub>2</sub>PONa gave a poor yield of *MeEtAsPO(O)(OBu)<sub>2</sub>*, b.p. 99.0-0.5°, b.p. 110-12°, d<sub>4</sub><sup>20</sup> 1.1932, d<sub>4</sub><sup>25</sup> 1.1733, n<sub>D</sub><sup>20</sup> 1.4761. Et<sub>2</sub>BuAsI gave 52% *EtB<sub>2</sub>AsPO(O)OBu<sub>2</sub>*, b.p. 116.7°, d<sub>4</sub><sup>20</sup> 1.1226, d<sub>4</sub><sup>25</sup> 1.1048, n<sub>D</sub><sup>20</sup> 1.4755. *EtB<sub>2</sub>AsPO(O)OBu<sub>2</sub>* (0.9%), b.p. 165.6°, d<sub>4</sub><sup>20</sup> 1.2620, d<sub>4</sub><sup>25</sup> 1.2115, n<sub>D</sub><sup>20</sup> 1.4765, was obtained similarly. As was 60.2% *Et<sub>2</sub>BuAsPO(O)OBu<sub>2</sub>*, b.p. 126.6-5°, d<sub>4</sub><sup>20</sup> 1.2031, d<sub>4</sub><sup>25</sup> 1.1856, n<sub>D</sub><sup>20</sup> 1.4769. An oxidation of hydrolyzed *Et<sub>2</sub>BuAsPO(O)OBu<sub>2</sub>* by boiling 6 hrs. with concd. HCl gave *Et<sub>2</sub>BuAsPO(O)OBu<sub>2</sub>*, b.p. 188.9°. G. M. Kosolopoff

BELOROSSOVA, T.S.; MERMAN, N.V.; SOSNINA, M.A.

A new mirror-lens objective. Astron.zhur. 39 no.2:330-334  
Mr-Ap '62. (MIRA 15:3)

1. Glavnaya astronomicheskaya observatoriya AN SSSR.  
(Lenses) (Telescope, Reflecting)

BELOROSSOVA, T. S.; MAKSUTOV, D. D.; MERMAN, N. V.; SOSNINA, M. A.

Comparison of the three types of mirror-lens systems: meniscus,  
Richter and Slevogt, and Schmidt. Izv. GAO 22 no. 4:114-122 '61.  
(MIRA 14:10)

(Telescope, Reflecting)  
(Lenses)

3/1220

S/035/62/000/012/028/064  
A001/A101

AUTHORS: Belorossova, T. S., Maksutov, D. D., Merman, N. V., Sosnina, M. A.

TITLE: Comparison of three types of mirror-lens systems; meniscus,  
Richter-Slevogt and Schmidt

PERIODICAL: Referativnyy zhurnal, Astronomiya i Geodeziya, no. 12, 1962, 75,  
abstract 12A561 ("Izv. Gl. astron. observ. v Pulkove", 1961, v.22,  
no. 4, 11<sup>4</sup> - 122, English summary)

TEXT: The results of comparing three types of mirror-lens systems: me-  
niscus, Richter-Slevogt and Schmidt, are presented. The comparison was conducted  
at a diameter of the entrance aperture D=1000 mm for three aperture ratios: 1:2;  
1:3 and 1:4. The systems are achromatized and corrected for spherical aberration  
and coma. All investigated systems have been trigonometrically calculated in an  
exact way with the purpose of a rigorous study and comparison of aberrations  
caused by them. Adopted tolerances for aberration do not exceed 20  $\mu$ . The com-  
parison method is described in detail. The tables and graphs show the results of  
comparison of the systems in respect to effective field of view, length of

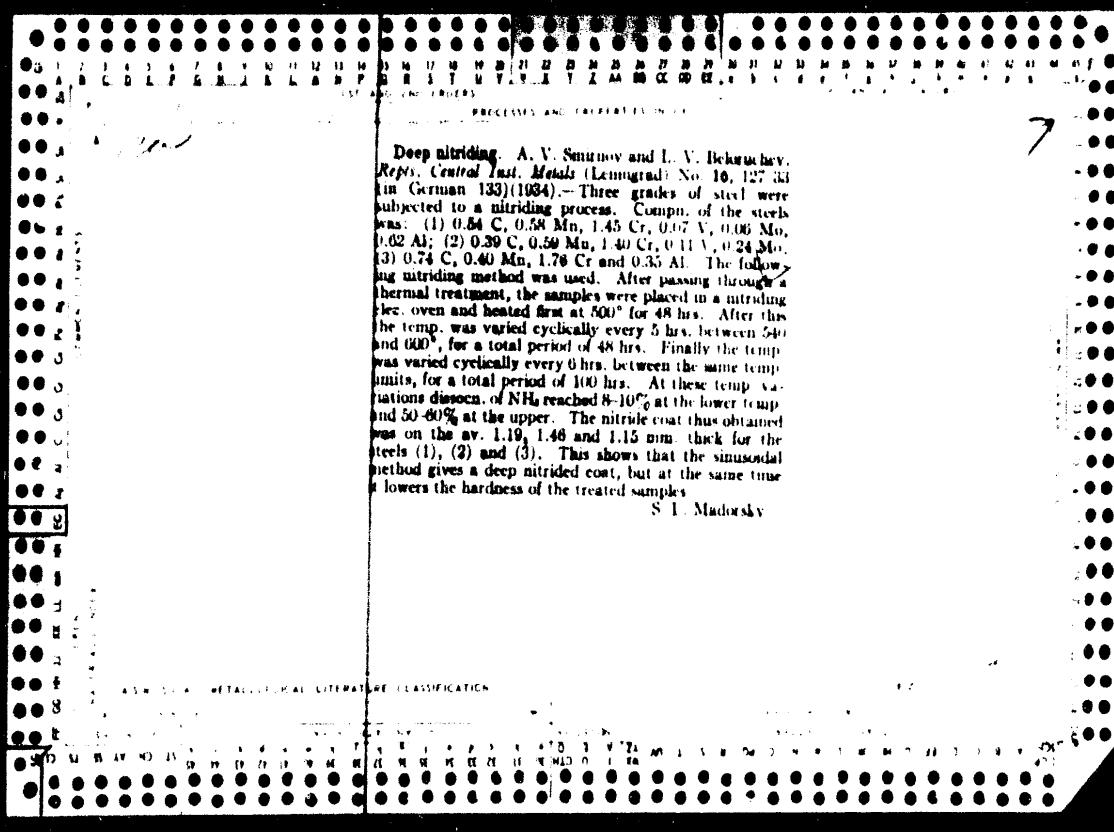
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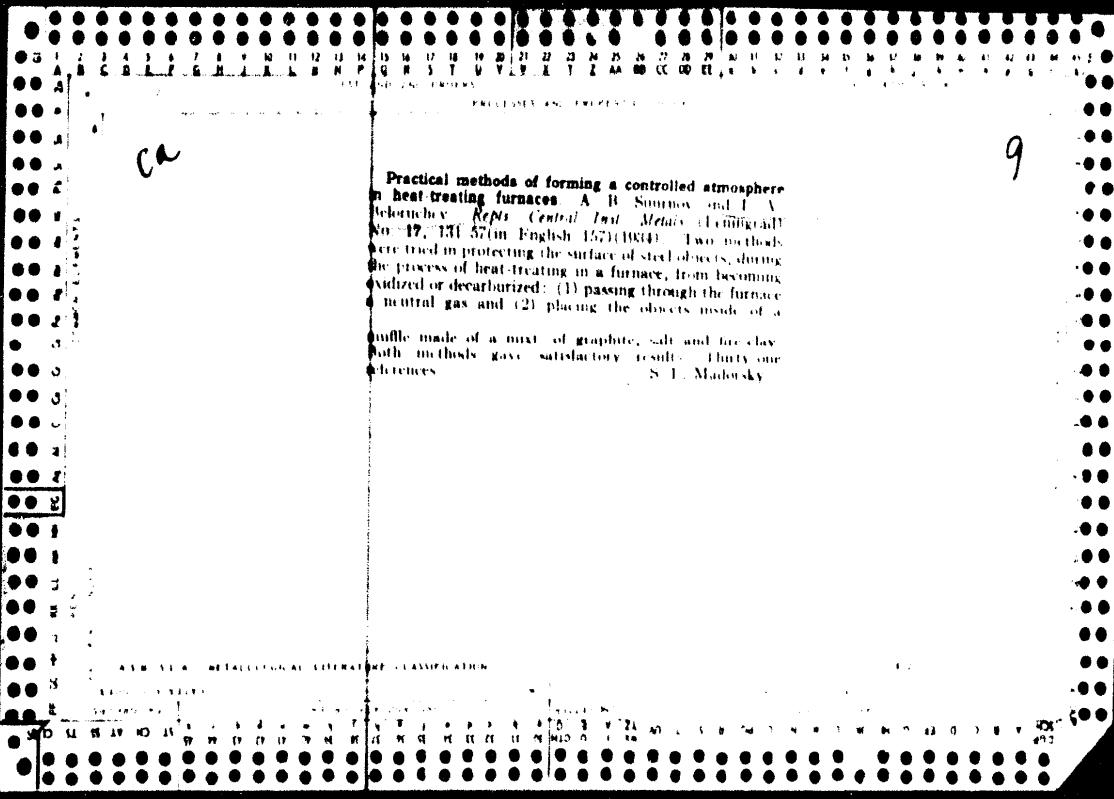
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ALL INFORMATION CONTAINED  
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DATE 12/20/07 BY SP/SP/SP

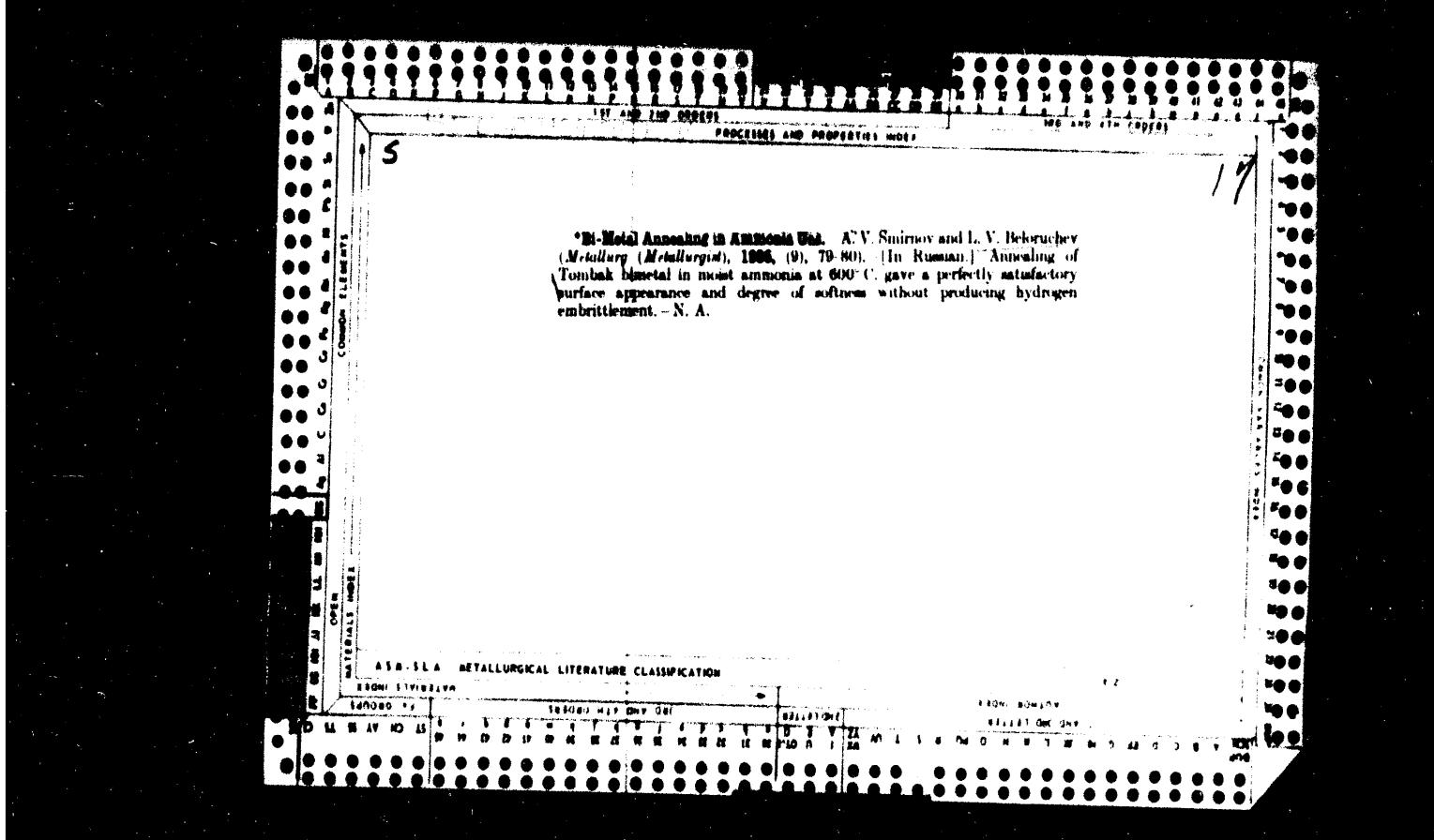
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Belorukhev, L.V.

ABSTRACT: Low-Temperature Tempering of Wires for Prestressed  
Concrete and Cables. (A method of tempering against preexisting  
stresses.) L. V. Belorukhev. (Russian.) L. V. Belorukhev.  
Str., v. 16, no. 1, Jan. 1954, p. 55-62.

Tempering procedure results in improved mechanical properties, including resistance to relaxation of stresses, and the elimination of stresses leading to the untwisting of cables. Tables, graphs. 8 ref.

# БЕЛОРУССКЕВ, Л.У.

24(0); 5(4); 6(2) PHASE I BOOK EXPLOITATION SOV-22-5

Vsesoyuzny nauchno-issledovatel'skiy institut metrologii imeni D.I. Mendelejeva

Referat nauchno-issledovatel'skikh rabot; abomik No.2 (Scientific Research Abstracts. Collection of Articles, Nr 2) Moscow, Standardiz., 1958. 139 P. 1,000 copies printed.

Additional Sponsoring Agency: USSR. Komitet standartov, mer i izmeritel'nay priborov.

Ed.: S. V. Rekterina; Tech. Ed.: M. A. Kondrat'yeva.

PURPOSE: These reports are intended for scientists, researchers, and engineers engaged in developing standards, measures, and usage for the various industries.

COVERAGE: The volume contains 128 reports on standards of measurement and control. The reports were prepared by scientists of institutes of the Komitet standartov, Mer i izmeritel'nykh priborov pri Sovete Ministrov SSSR (Commission on Standards, Measures, and Measuring Instruments under the USSR Council of Ministers). The participating institutes are: VNIM (Vsesoyuzny nauchno-issledovatel'skiy mer i izmeritel'nyi in-t imeni D.I. Mendelejeva (All-Union Scientific Research Institute of Metrology imeni D.I. Mendelejeva) in Leningrad; Sverdlovsk branch of this institute; VNIIK - Vsesoyuzny nauchno-issledovatel'skiy institut Komiteata standartov, Mer i izmeritel'nykh priborov (All-Union Scientific Research Institute of the Commission on Standards, Measures, and Measuring Instruments), created from MGIMP (Moskovskiy Gosudarstvennyi Institut mer i izmeritel'nykh priborov) (Moscow State Institute of Measures and Measuring Instruments); October 22, 1957, VNIPMT (Vsesoyuzny nauchno-issledovatel'skiy nauchno-tekhnicheskii in-t po radioelektronike i radioelektronnoj elektronike) (Institute of Radioelectronics and Radioelectronics Instrumentation); and Khar'kov State Institute of Measures and Measuring Instruments (Kharkov State Institute of Measures and Measuring Instruments); and MGIMP - Novosibirskiy Gosudarstvennyi Institut mer i izmeritel'nykh priborov (Novosibirsk State Institute of Measures and Measuring Instruments). No personnelies are mentioned. There are no references.

Branch or VNIM: Effect of Rigidity of the Dynamometer of Testing Machines on the Extension Difference in Determining Yield Points without Using a Test Piece

Zaytsev, G.P., P.S. Savitskiy (Sverdlovsk Branch of VNIM), in the Range of 0 to 2 Kilograms per Square Centimeter.

Burmanin, O.P. (Vsesoyuzny Branch of VNIM), Study of Pressure Points and Uniform Elongation without Tensile Tests (one method)

Pressure Measurements (Dolinskii, Ye.P., Editor, Candidate of Technical Sciences)

Gromantsev, V.N. (VNIPMT), Pressure Gauge for Accurate Measuring in the Range of 0 to 2 Kilograms per Square Centimeter.

Burmanin, O.P. (Vsesoyuzny Branch of VNIM), Study of Pressure Measurements Errors of Weights of a Precision Meter of the Four-jaw Geobin Type

Card 1/27

2017 RELEASE UNDER E.O. 14176

AUTHORS: Beloruchev, L.V., Candidate of Technical Sciences, and  
Shvachkin, A.K., Engineer

TITLE: Protective Atmospheres from Technical Nitrogen for  
Thermal Treatment of Steel (Zashchitnyye atmosfery  
iz tekhnicheskogo azota dlya termicheskoy obrabotki  
stali)

PERIODICAL: Stal', 1959, Nr 4, pp 354-360 (USSR)

ABSTRACT: The use of technical nitrogen, obtained from oxygen producing plants, for protective atmospheres for thermal treatment of steel is discussed. Two methods of purification of nitrogen from the residual oxygen are proposed: the use of liquid ammonia and charcoal generator. Technological scheme for the production of protective atmosphere from nitrogen with 4 to 10% of hydrogen dried to -40° dew point, of an output 200 m<sup>3</sup>/hr designed by Giprometiz is shown in Fig 1. As a source of hydrogen, combining residual oxygen and entering into the composition of protective gas, liquid ammonia is used. Ammonia is dissociated at 900°C over a catalyst. The final removal of oxygen is done over a palladium catalyst (Fig 5). The cheapest method of the production of

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507/133-59-4-20/32  
Protective Atmospheres from Technical Nitrogen for thermal  
Treatment of Steel

protective atmosphere is by passing technical nitrogen through a retort with incandescent charcoal (900°C). The scheme of the plants for this purpose designed by Stal'projekt is shown in figures 6 and 7. Approximate costs of various protective atmospheres are compared in the table. There are 7 figures and 1 table.

ASSOCIATION: Giprometiz

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: BELORUCHEV, L. V.

PHASE I BOOK EXPLOITATION

SOV/5837

Sedkov, Aleksandr Vasil'yevich, Doctor of Technical Sciences, and Lev Vladimirovich Beloruchev, Candidate of Technical Sciences

Kontrolliruyemye atmosfery i ikh primeneniye dlya termicheskoy i khimiko-termicheskoy obrabotki metallov; obzor (Controlled Atmospheres and Their Use in Heat and Thermochemical Treatment of Metals; Survey) Leningrad, 1960. 74 p. (Series: Leningradskiy Dom nauchno-tehnicheskoy propagandy. Seriya: Metallovedeniye i termicheskaya obrabotka). Errata slip inserted. 5500 copies printed.

Sponsoring Agency: Obshchestvo po rasprostraneniyu politicheskikh i nauchnykh znanii RSFSR. NTO Mashprom Leningradskoye oblastnoye pravleniye. Leningradskiy Dom nauchno-tehnicheskoy propagandy. Sektsiya metallovedeniya i termicheskoy obrabotki.

Ed.: A. D. Nachinkov; Ed. of Publishing House: V. A. Shilling; Tech. Ed.: M. M. Kubneva.

PURPOSE: This booklet is intended for technical personnel concerned with the use of controlled atmospheres in the heat treatment of metals.

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Controlled Atmospheres and Their Use (Cont.)

SOV/5837

COVERAGE: The principal types of controlled protective atmospheres, their classification, and purposes are discussed. Progress in methods of preparing controlled atmospheres and some changes in the theoretical considerations relating to them are examined. Attention is given to the use of controlled atmospheres in annealing, quench-hardening, tempering, thermchemical treatment, and for other purposes (sintering of powdered metals, recarburizing of blanks). The booklet is based on the 1953 edition of *Protective Atmospheres*, by A. G. Hotchkiss and E. M. Webber, and is supplemented with material on the main achievements of the period 1953-1960. According to the Introduction, furnaces with controlled protective atmospheres numbered in the thousands in the United States by 1953, and only in the tens in the USSR and Europe by 1960. No personalities are mentioned. There are 92 references: 42 Soviet, 33 English, 10 French, 7 German, 1 Spanish, and 1 Czech.

TABLE OF CONTENTS:

Foreword

Introduction

1. Classification of Controlled Atmospheres
2. Purpose of Controlled Atmospheres
3. Advanced Changes in the Preparation of Standard Controlled Atmospheres

Card 2/3

AFANAS'YEVA, L.N.; BEGORUCHEV, L.V., kand. tekhn.nauk, dots., red.;  
KLOPOVA, T.B., red. izd-va

[Mechanization and automation of industrial operations based  
on heat treatment and case hardening; bibliographic index]  
Mekhanizatsiya i avtomatizatsiya proizvodstvennykh operatsii  
pri termicheskoi i khimiko-termicheskoi obrabotke; biblio-  
graficheskii ukazatel'. Pod red. L.V.Belorucheva. Lenin-  
grad, Leningr.dom nauchno-tekhn.propagundy, 1962. 47 p.

(MIRA 15:8)

(Bibliography--Metals--Heat treatment)  
(Bibliography--Case hardening)  
(Automation)

BELORUCHEV, L.V.; KARMANOVA, Ye.G.; KNOBUD, M.M.; KULESHOVA, V.D.;  
CHEREPKOVA, K.F.

Phase transformations and recrystallization in peritectic  
type alloys. Metalloved. i term. otr. nauch. zhurn. No. 3, 1964.  
Ag '64.

"MFA 17.10"

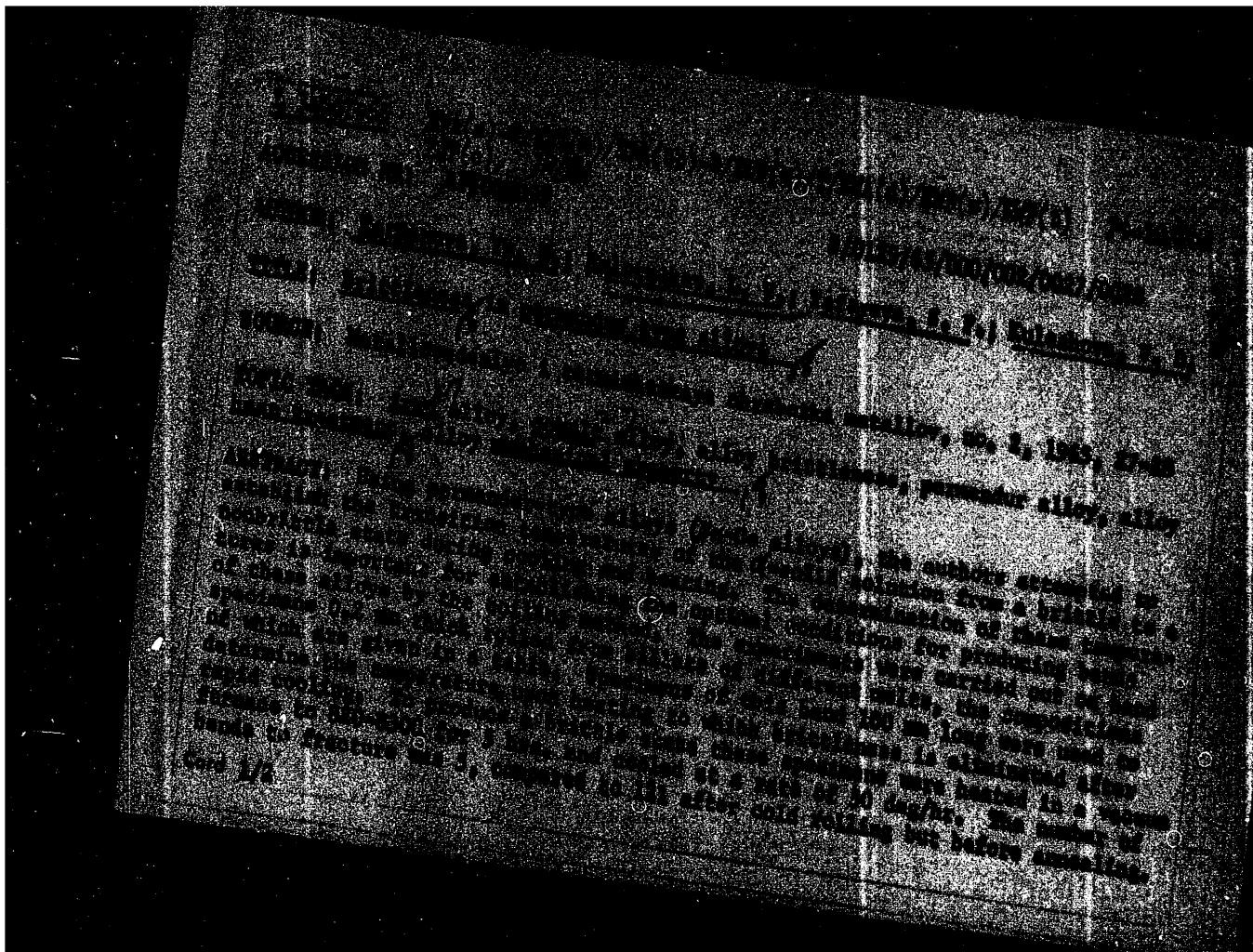
1. Severo-zapadnyy zaochnyy politekhnicheskiy institut.  
Leningradskiy stalsprokatnyy zavod.

SMIRNOV, Aleksandr Vasil'yevich; BEGORUCHEV, Lev Vladimirovich;  
KAPLUN, Ruvim Iosifovich; MORSHTEYN, Isaak Mikhaylovich;  
TSUKANOV, Vladimir Andreyevich; NACHINKOV, A.D., red.

[Nitriding passivating steels with the use of carbon tetrachloride] Azotirovanie passiviruiushchikh sstalei s prime-  
neniem chetyrekhkhloristogo ugleroda. Leningrad, 1964. 20 p.  
(Leningradskii dom nauchno-tehnicheskoi propaizvindы. Peredo-  
voi proizvodstvennyi opyt. Seriia: Metallovedenie i termiche-  
skaia obrabotka, no.3)

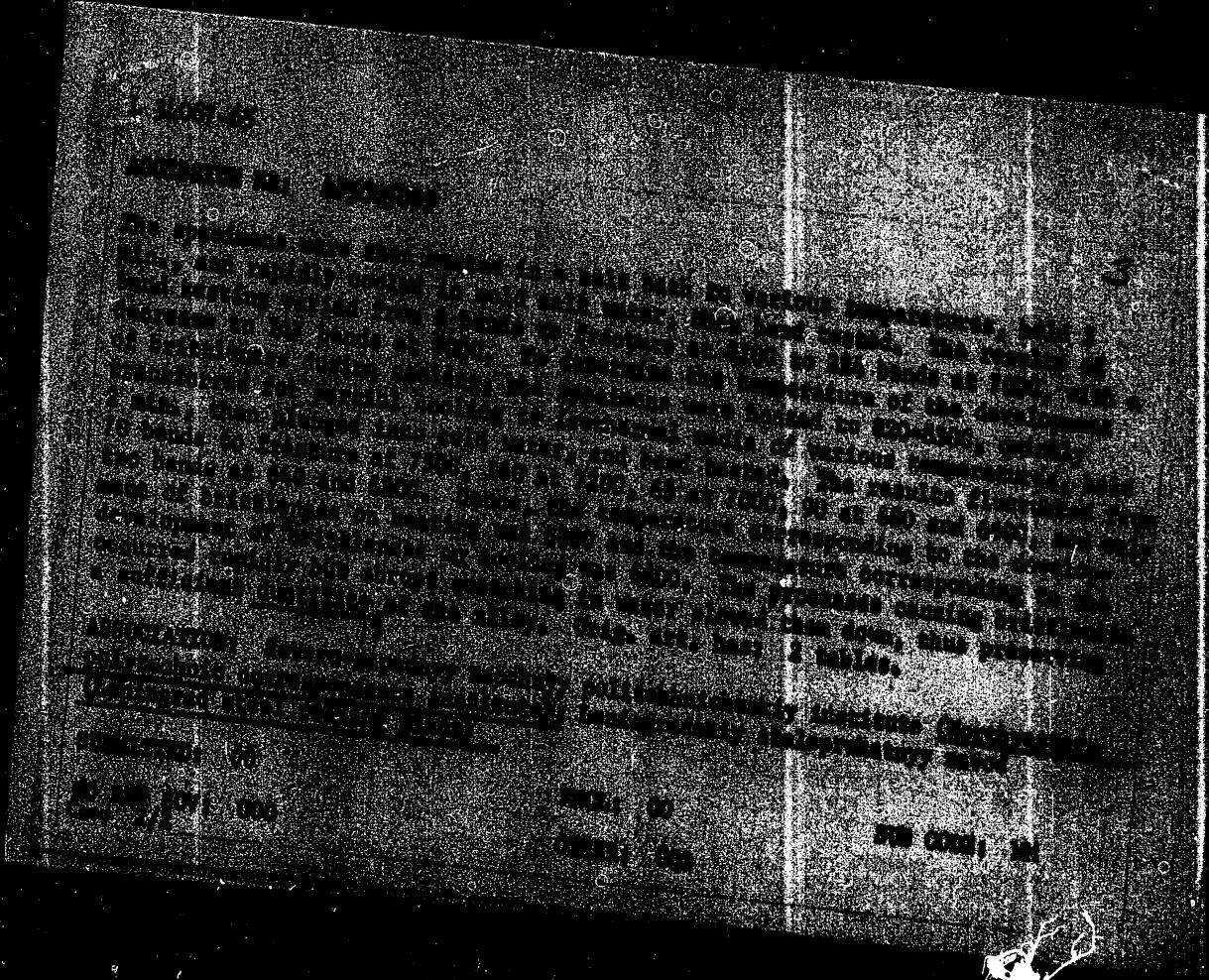
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ACCESSION NR: AP4044141

S/0129/64/000/008/0044/0046

AUTHOR: Beloruchev, L. V.; Karmanova, Ye. G.; Knoroz, M. M.; Kuleshova, V. D.  
Cherepkova, K. P.

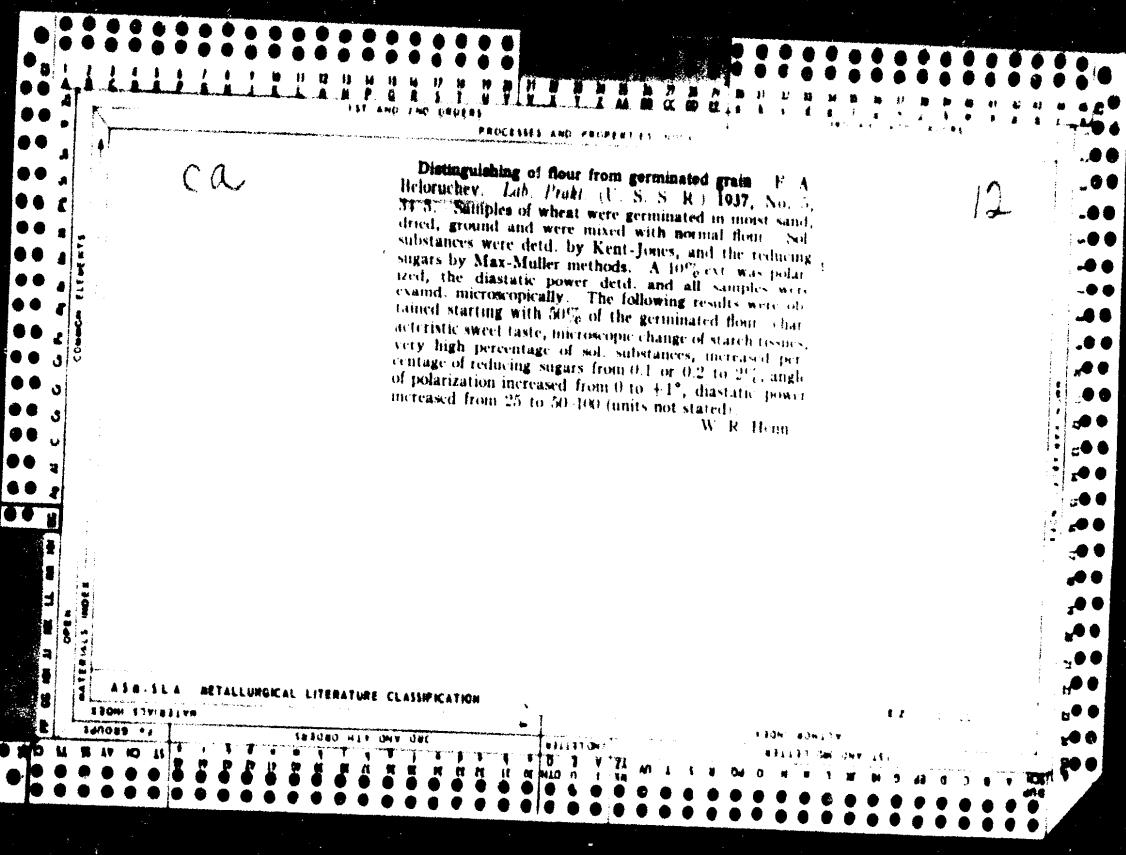
TITLE: Phase transformation and recrystallization in a Permendur-type alloy

SOURCE: Metalovedeniye i termicheskaya obrabotka metallov, no. 8, 1964, 44-46  
TOPIC TAGS: alloy, iron cobalt alloy, Permendur, phase transformation, alloy  
recrystallization/ alloy EP207

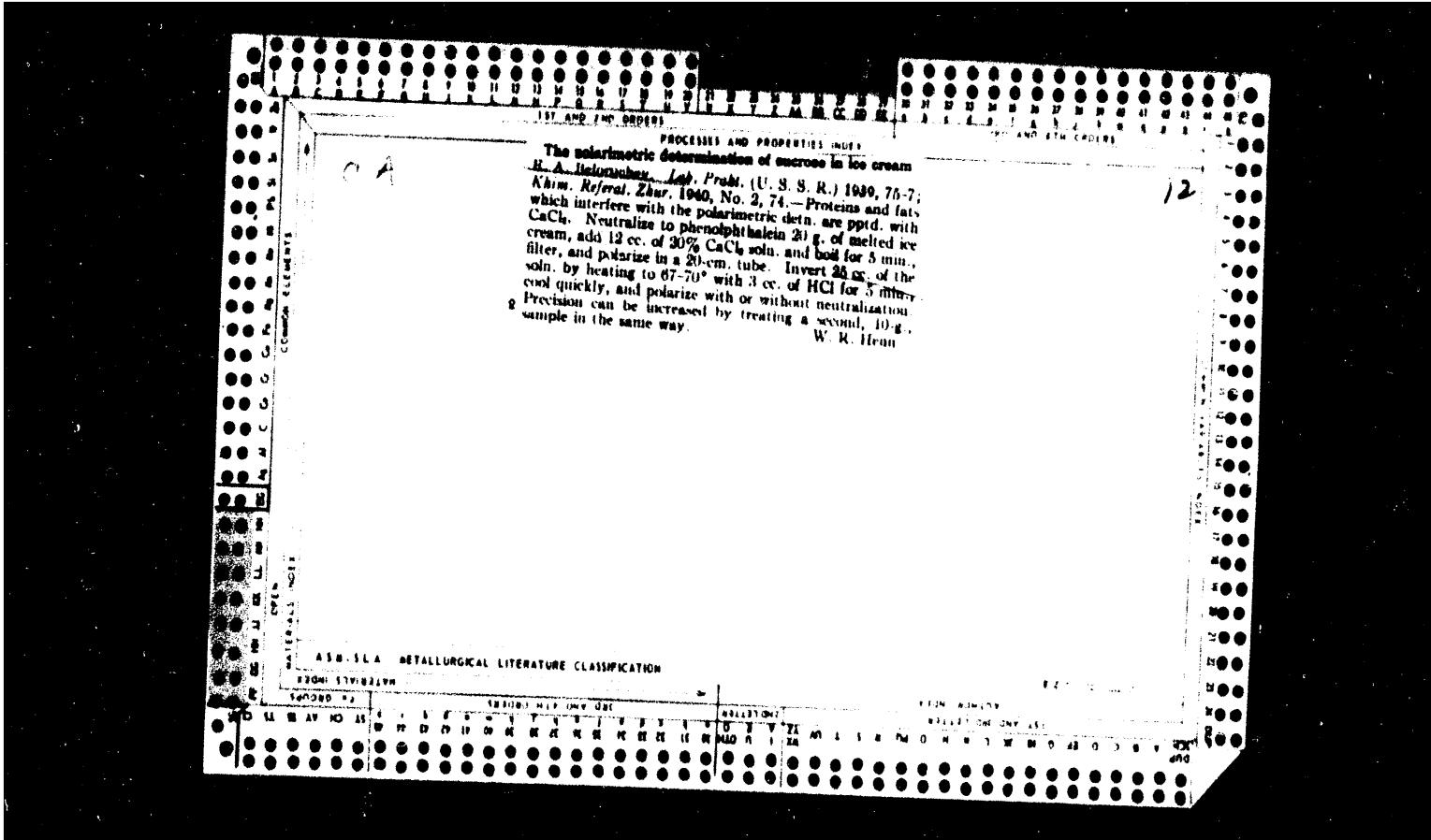
ABSTRACT: 2 x 3.2 x 50 mm rectangular samples of alloy EP207 (approx. 50% Fe and 50% Co) were examined dilatometrically to establish the lower limits of  $\alpha \rightarrow \beta$ -conversion and recrystallization. The samples, which were preannealed at 830C for 5 hrs. in a vacuum-oven and water-quenched, were heated at a rate of 4-5 degrees/min. to 1050C in a dilatometer, held at that temperature for 15-20 min. and cooled at a rate of 20 degrees/min. From dilatometric curves for the process (not shown) it was found that  $\alpha \rightarrow \beta$  conversion sets in at 915-930C during heating and is considerably retarded during cooling. The values of the coefficient of linear expansion at 100-800C were also determined for four different melts from the curves. In a study of recrystallization, 0.2 mm thick alloy samples which had been deformed to 90% by cold rolling were annealed at 650, 680, 700, 720, 740, 760, 780, 820, 860 and 900C for 1 hr. at  $1 \times 10^{-4}$  -  $1 \times 10^{-5}$  mm Hg in a vacuum oven. By examining

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APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000204400011-6

**Identification of sugars and of mannitol.** E. A. Jelka  
Tucker. *Lab. Prakt.* (U. S. S. R.) 14, No. 9, 101 (1930).—On the basis of the characteristic properties of glucose, fructose, arabinose, sucrose, lactose, maltose and mannitol a table has been prepared by means of which any of these substances can be identified. The properties which are considered are the reaction to Fehling's solution, the reaction to Barfoed's reagent (13.3 g. of Cu acetate dissolved in 200 cc. of a 1% soln. of  $\text{Ca(OH)}_2$ ), the reaction to Fehling's soln., after inversion, the characteristics of the obtained osmazones and the polarization of the substances. Three references are given. W. B. homo.

## ASIA-SEA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000204400011-6

**Rapid method of determination of arsenic in flour.**  
E. A. Belorubev. *Gigiena i Sanit.* 12, No. 7, 50-1 (1947). To 10 g. mixt. of 1 oz. of flour with 100 ml. water add 2 ml. of 10%  $H_2SO_4$ , stir, heat to 50°, after 1 min. filter, evap. 40-50 ml. of the filtrate with 7 ml. of  $H_2SO_4$  to  $SO_2$  fumes (avoiding charring by a tiny drop by drop of perhydroxyl), transfer to a measuring cylinder contg. 15 ml. of  $H_2O$ , make up to 50 ml., and det. As by any desired method.

Anastasia J. Romanoff

## AMERICA METALLURGICAL LITERATURE CLASSIFICATION

CA BEC 12

Toxicity of *Galeopsis speciosa*. I. Belorukhev (Regional Botanical Lab., Kaluga) *Tsigada i Sotil' 1950*, No. 5, 48 p. The oil of the plant is highly toxic to white mice. 1 g. gives temporary illness, 3 g. leads to fatality. Since the consumption of the plant has been causing illness in man and animals it is suggested that tolerances of its presence in foods be established and that other species be examined for toxicity. *G. tetrahit* is already known to be highly toxic.

G. M. Kosolapoff

## *Review of Applied Mycology*

BELORUCHEV (E. A.). Как приготовить для длительного хранения коллекцию  
шляпочных грибов. [How to prepare a collection of cap fungi for long pre-  
servation.]— Практ. [Nature], 1951, 7, p. 89, 1 fig., 1961.

A satisfactory method of preserving the larger fungi for many years with their  
natural freshness and colour consists in pricking the stipe and the cap of a healthy

specimen, freshly gathered in dry weather, with a needle and pouring over it  
Magnitaky's solution (5 gm. boric acid, 10 ml. 5 per cent. zinc sulphite, 200 ml.  
10 per cent. formalin, 10 ml. distilled water, and 30 gm. sugar). After soaking for  
two to six hours and drying for half an hour on a plate in the dark, the fungus is  
fixed on the vertical end of a wire rising from a flat spiral base inside a glass cup.  
The cup is filled with carbon dioxide and sealed with a ground glass stopper  
smearred with vaseline.

BALORUCHEV, Ye.A. (Kaluga)

A method for detecting the deathcap in the analysis of salted mushrooms. (Hg.i san. 24 no.8:52-54 Ag '59. (MIRA 12:11)  
(MUSHROOMS)

BELORUCHKO, N. Ye.

Beloruchko, N. Ye. "The agrotechnology of the leaders of flax cultivation in the Zhitomir region", "Trudy Zhitomirsk. s. - kh. in-ta", Vol. III, 1949, p. 61-69.  
SO: U-4630, 16 Sept. 53. (Izdatel'stvo Zhurnal'nykh Statey, No. 13, 1949).

BELORUKOV, S.

Mechanized production of adobe. Sel'. stroi. 13 no.4:13 Ap '59.  
(MIRA 12:6)

1. Nachal'nik upravleniya stroitel'stva Yaroslavskogo oblastnogo  
upravleniya sel'skogo khozyaystva,  
(Yaroslavl Province--Building, Adobe)

FINKEL', V.M., BEGORUKOV, V.F.

Classification and occurrence of residual stresses.  
Zav.lab. 26 no.7:859-860 '60.

(MIRA 13:7)

1. Sibirskiy metallurgicheskiy institut im. S. Ordzhonikidze.  
(Deformations (Mechanics)) (Strains and stresses)

FINKEL', V.M.; KUTKIN, I.A.; BEGORUKOV, V.F.

Branching of cracks in steel. Fiz. met. i metalloved. 15 no.5:  
754-764 My '63.  
(MIRA 16:8)

1. Sibirskiy metallurgicheskiy institut.  
(Steel--Metallography)

L18511-63	IMP(0)/ENT(1)/DIS	APPCG/ASD	JD/HW
ACCESSION NR: AP3001702	8/0126/63/015/005/0754/0764		
AUTHORS: <u>Zinkel', V. M.</u> ; <u>Kutkin, I. A.</u> ; <u>Belorukov, V. F.</u>	59	58	
TITLE: Branching of cracks in steel			
SOURCE: Fizika metallov i metallovedeniya, v. 15, no. 5, 1963, 754-764			
TOPIC TAGS: crack in steel, crack branching			
<p><b>ABSTRACT:</b> The formation of crack branching in steel has been photographed by a motion picture camera in order to study kinetics of the process and to investigate microscopically the progress of cracking in the shrinkage zone. Oil-hardened samples of steels ShKh-15 and 85KhV were used and a great variety in branching types was observed (see enclosure). The measurements of crack progress showed that high velocity of crack formation does not necessarily produce branching. It is assumed that the mechanism of branching is based on the magnitude and distribution of residual stresses in the adjacent regions. Tensile forces acting toward the crack from the internal stress field break the advance of the crack, tending to change its trajectory (determined by external tension and sample configuration).</p>			
Card 1/2			

L 18511-61

ACCESSION NR: AF3001702

Certain portions of steel at the crack front yield under the action of these internal forces, and branching results. Orig. art. has: 7 figures

ASSOCIATION: Sibmkiy metallurgicheskiy institut (Siberian Metallurgical Institute)

SUBMITTED: 26Jul62

DATE ACQ: 11Jul63

ENCL: 01

SUB CODE: ML

NO REF Sov: 003

OTHER: 003

Card 2/2

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YEFIMOV, A.I.; BEGORUKOVA, L.P.; RYNDINA, A.M.

Complex compounds of the  $M_2^1 MoCl_6$  type. Zhur.neorg.khim. 8  
no.5:1168-1171 My '63. (MIRA 16:5)  
(Molybdenum chlorides) (Alkali metal chlorides) (Thermal analysis)

BELORUS, S., agronom-sadovod

Roadside gardens on highways in the Donets Basin area. Avt.dor.  
21 no.3:31 Mr '58.  
(Donets Basin--Roadside improvement) (MIRA 11:3)

AUTHOR: Belorusets, A. S., Engineer 207/111 58 16/29

TITLE: Mechanization of Production Processes at Postal installations  
of the Ukraine (Mekhanizatsiya proizvodstvennykh protsessov  
na pochtovykh predpriyatiyah Ukrayiny)

PERIODICAL: Vestnik svyazi, 1958, Nr 3, p 24 - 25 (Ukr)

ABSTRACT: The article contains a review of the progress made during  
the past years in mechanizing the processing of mail. The  
author lists the number of machines, post-marking machines,  
conveyers, computers, trucks and tractors, etc, which were  
distributed to various post offices of the Ukraine. He con-  
cludes his article with the statement that the degree of me-  
chanization of mail processing is still inadequate and that  
further measures are required. There are three photos.

ASSOCIATION: Laboratoriya pochtovoy tekhniki Ministerstva svyazi UkrSSR  
(The Postal Engineering Laboratory of the Ukrainian SSR  
Ministry of Communications)

BELORUSETS, Boris Mikhaylovich; DENISOVA, I., redaktor; KIRSANOV, N.,  
tekhnicheskiy redaktor.

[Protection of labor in foundry practice] Okhrana truda v liteinom  
proizvodstve. [Moskva] Izd-vo VTsSPS Profizdat, 1954. 103 p.  
(Founding--Safety measures) (MLRA 8:1)

BELORUSETS, Boris Mikhaylovich; ROSSIYANOV, D.D., inzh., retsenznet;  
SHAMIRGON, S.A., inzh., retsenzent; BROMLEY, M.F., kand.tekhn.  
nauk, red.; BARYKOVA, G.I., red.izd-va; EL'KIND, V.D., tekhn.red.

[Safety engineering and hygiene in the production of iron and  
steel shape castings] Tekhnika bezopasnosti i sanitariia pri  
proizvodstve chugunnogo i stal'nego fasonnogo lit'ia. Moskva,  
Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1957. 235 p.  
(Founding) (MIRA 11:5)

PHASE I BOOK EXPLOITATION

SOV/3463

Belorusets, Boris Mikhaylovich

Okhrana truda v liteynom prizvodstve (Safety Engineering In Foundry),  
3rd ed., rev. [Moscow] Profizdat, 1958. 124 p. (Series: V pomoshch'  
profaktivu po okhrane truda) 10,000 copies printed.

Ed.: I. S. Denisova; Tech. Ed.: S. I. Rakov.

PURPOSE: This booklet is intended for safety engineers and for labor-union  
members concerned with safety-engineering problems

COVERAGE: Means of improving working conditions at foundries are discussed.  
Attention is given to special safety requirements in various sections of  
foundries. No personalities are mentioned. There are no references

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SOV/3463

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80V/3463

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AVAILABLE: Library of Congress (TS233.B44 1958)

Card 3/3

VK/ec  
6-16-60

BELOHUSETS. B.M., inzh.

Reorganization of foundry shops improves working conditions.  
Besop. truda v prom. 4 no.2:27-29 F '60. (MIRA 13:5)

1. Zavod "Stankolit."  
(Foundries--Safety measures)

BELORUSETS, B.M.; KATASONOV, N.Ye.

Improvement of working conditions in foundries. Lit. proissv.  
no. 8:16 Ag '60. (MIRA 14:2)  
(Foundry—Hygienic aspects)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000204400011-6

BELORUSETS, B. M.; RUDLEV, S. S.

Improving sanitary conditions for foundry workers. Mashinos-troitel' no.10:16-19 '60.  
(MIRA 13:10)  
(Founding--Hygienic aspects)

BELORUSETS, B.M.; SHTOL'LER, L.V., inzh., retsenzent, RYSAKOV,  
T.M., retsenzent; IFRONLEY, M.F., kand. tekhn. nauk, red.

[Labor safety in the machinery industry] Bezopasnost' truda  
v mashinostroenii. Moskva, Mashgiz, 1963. 194 p.

(MIRA 12.3)

BELORUSETS, H.M.; MIKHAYLOVA, V.L., inzh., retsenzent; DUKHANIN,  
Yu.A., inzh., red.

[Safety measures in foundry practice] Bezopasnost' truda  
v liteinom proizvodstve. Moskva, Mashinostroenie, 1964.  
102 p.  
(MIRA 18:7)

BELORUSETS, Esfir' Arnol'dovna; ZHILIN, Arkadiy Andreyevich;  
CHERNYAYKIN, V.A., red.; GALAKTIONOVA, Ye.N., tekhn. red.

[The Skoda-1201 motortruck] Avtomobil' Shkoda-1201. Moskva,  
Avtotransizdat, 1962. 116 p. (MIRA 15:11)  
(Motortrucks)

S/029/60/000/07/22/024  
B013/B058

AUTHORS: Belorusets, M., Engineer, Ionov, B., Engineer

TITLE: The Miracle Screen

PERIODICAL: Tekhnika molodezhi, 1960, No. 7, pp. 37-39

TEXT: The authors report on the manufacture of screen films for the graphic industry. The technology of the three classical printing methods, relief-, surface-, and intaglio printing, is explained in the introduction. The Moskovskiy poligraficheskiy institut (Moscow Polygraphic Institute) has set the problem to its Scientific Students' Society to develop screen films, the manufacture of which should be simpler and cheaper compared with the foreign material. These films should also produce perfect reproductions. Under the supervision of Nikolay Ivanovich Sinyakov, Docent, Candidate of Technical Sciences, the students developed several methods for the manufacture of screen films. The new material was tested under operational conditions and patented. Screen films for relief-, surface-, and intaglio printing were developed. The new screen-film<sup>material</sup> differs from common films by the fact that the silver halide crystals are in strict order in the

Card 1/2

BELORUSETS, M., inzh.

How a calendar is manufactured. Tekh. mol. no. 5:18-19 My '62.  
(Calendars) (MIRA 15:6)

BELORUSETS, M.M.

Work of the office of technological information in Obraztsovo  
Printing Plant No.1. Opyt rab. po tekhn. inform. i prop.  
no.2;16-17 '63. (MIRA 16;12)

1. Nachal'nik byuro tekhnicheskoy informatsii l-oy Obraztsovoy  
tipografii im. Zhdanova.

BELORUSETS, Ye.

Wintering of representatives of the Caucasian tree flora in Kiev.  
Vest.Bot.sada AN Cruz.SSR no.66:129-135 '60. (MIkA 14:10)  
(Kiev--Plant introduction) (Trees)

25(5)

AUTHOR: Belorusets, Ye.I., Engineer 60V/23-59-2-7, 66

TITLE: Economy in Standardizing Knife Grinding Lathes (Ekonomichnost' unifikatsii nozhetochil'nykh stankov)

PERIODICAL: Standartizatsiya, 1959, Nr 7, pp 17-29 (USSR)

ABSTRACT: In view of the increased demand for lathes for automatic grinding of plane knives from the wood-working and allied industries, which require a large number of such lathes, it was decided to create a new standardized series. The lathe models produced by the Yaroslavl' Plant "Proletarskaya Svoboda", although basically of similar construction differ in many details from each other; similarly, the model built by the Kirov Plant "Metallist" differs considerably from other models built by this plant. Finally the models TChN6, TChN12, TChN18 and TChN33 were chosen. The author describes the characteristics of these new lathes, which will differ from each other only by secondary details. The chosen models being less heavy, the author finds by theoretical calculations that the economy

Card 1/2

25(5)

Economy in Standardizing Knife Grinding Lathes

AMV 10/15/62, 10/15/62

made on metal is larger than the expenses caused by the necessary changes in machines for the production of these lathes.

Card 2/2

BELORUSETS, Ye.

The OS-325 diamond boring machine. Biul.tekh.-ekon.inform.  
no.8:41-42 '61. (Drilling and boring machinery) (MIRA 14:8)

БІЛОРУСЕТС, Я.Ш. [Bilorusets', І.Ш.]

Reorganizing the "system of higher plants" at the Botanical Garden  
of Kiev University. Nauk zap. Kyiv. un. 16 no.1:45-54 '57.

(Kiev--Botanical gardens) (Botany--Classification) (MIRA 11:6)

BELORUSETS, Ye.Sh.; DARBIN', V.Ya.

Effect of the winter 1955/56 on the state of trees in Kiev.  
Biul.Glav.bot.sada no.32:10-11 '58. (MIRA 12:5)

1. Botanicheskiy sad Kiyevskogo gosudarstvennogo universiteta  
im. T.G.Shevchenko.  
(Kiev--Trees) (Plants--Frost resistance)

BELORUSETS, Ye.Sh. [Bilorusets', IE.Sh.]

Representatives of the tree flora of the Caucasus in the Ukraine.  
Visnyk Kyiv.un. no.3. Ser.biol. no.1:13-22 '60.

(UKRAINE--PLANT INTRODUCTION)  
(UKRAINE--TREES)

(MIRA 16:4)

18.1150, 18.5000

7742  
SOV/130-60-1-12/22

AUTHOR: Belorusov, A. S. (Rolling Shop Foreman), Savartsbart,  
Ya. S. (Deputy Chief of Rolling Shop)

TITLE: Mastering of Production of Coiled Bi-Metal Strip

PERIODICAL: Metallurg, 1900, Nr 1, pp 25-27 (USSR)

ABSTRACT: According to State Standards (GOST 5198-50) bi-metal TB-3 is a two-layer material which consists of two alloys with a different coefficient of expansion. The active layer is made of N24Kn2 alloy and has a greater coefficient of expansion  $\geq 20 \cdot 10^{-6}$  per  $1^{\circ} C$ . The passive layer of N36 alloy has a smaller coefficient of expansion  $\leq 1.5 \cdot 10^{-6}$  per  $1^{\circ} C$ . Chemical composition of alloys:

	C	Si	Mn	Ni	Cr	Re
N24Kn2	0.25-0.35	0.15-0.30	0.30-0.60	22-25	2.0-3.0	remainder
N36	He max 0.05	—	—	35-37	—	—

Card 1/4

Mastering of Production of Celled Bi-Metal Strip 77429

SOI 150-60-1-12/22

The alloy plates are welded together under pressure by hot rolling. An intermediate layer of oxidation-free pure iron obtained by electrolytic reposition insures good welding. The electrolytic solution consists of 400 g/liter iron vitriol, 100-200 g/liter sodium chloride, and 4 g/liter hydrochloric acid or sulphuric acid. Before rolling the alloy, plates are welded along the perimeter. (Submerged arc welding, electrode, 3 mm diam Kh10N7-steel rod; flux, OSTs-45). The welding seam protects the iron from oxidation during heating before rolling. Hot rolling has to be done not later than 40 hr after welding, and must produce a straight sheet without lamination. This is achieved by the following method: (a) The upper layer of the plate should be N36-alloy; (b) The last rolling pass must be between the center and the bottom rolls of the three-high mill (350 mm and 750 mm diam, respectively). Sequence of operations: (1) Heating of TB-3 plate in mazut fired (mazut is Russian petroleum residue used as fuel oil) continuous

Card 2/4

Mastering of Production of Coiled Bi-Metal Strip

7742.

36V/15A- $\mu$ -100W

furnace (temperature at delivery, 1200° C, heating time 80 min); (2) Reduction in rolling mill (from 20 to 50% per pass); (3) Heating to 400-600° C; (4) Cutting of intermediate product on rotary shears; (5) Pickling in acid solution; (6) Magnetic inspection of proper position of component layers (magnetic component N30 on top of non-magnetic N24Kh2); (7) Trimming; (8) Butt welding and coiling of strips; (9) Flash removal; (10) Heat treatment of coils in dry hydrogen atmosphere as follows: (a) Heating to 950° C and holding each 100 kg. of coils 15 min; (b) cooling under the muffle for 7 hr, then in air. (11) Cold rolling on two parts mill at speeds not over 15 m/min to avoid excessive heating of rolls and prevent warping of the strip; (12) Cutting to size. The samples taken from each coil are tested for sensitivity coefficient, electric resistance, welding strength, and variation of layer thickness. The technology of producing bi-metal was developed with the participation of G. G. Kuznetsov, V. N. Zuevkin, A. A. Dzhemilev, I. N.

Card 3/4

Mastering of Production of Coiled Bi-Metal  
Strip

7742  
SOV 131-4-1-12, 21

Popov, V. S. Nikol'skiy, Yu. P. Karasev, G. N. Novikov,  
and B. S. Vaganov. There is 1 table; and 2 figures.

ASSOCIATION: "Elektrostal'" Plant (Zavod "Elektrostal'")

Card 4/4

BELORUSOV, B.

A combined method of control. Transp del 6 no.2:48 '54.

1. Kapitan na barkasa "Vouksa."

4

COMPARISON OF BASIC AND ACID BALL-BEARING AND CARBON TOOL STEEL MELTED IN AN ELECTRIC FURNACE. S. N. Belorugov. (Kachestvennaya Stal, 1937, No. 9, pp. 47-50). (In Russian). The author examines the effects of acid electric-furnace melting on the properties of the scrap carbon steel and ball-bearing steel remelted in them. Examination of the steels, with particular reference to grain size, the non-metallic inclusions and the porosity, showed the superiority of the acid over the basic process for remelting these steels.

ASA-SEA METALLURGICAL LITERATURE CLASSIFICATION

FORM SYNTHEZ

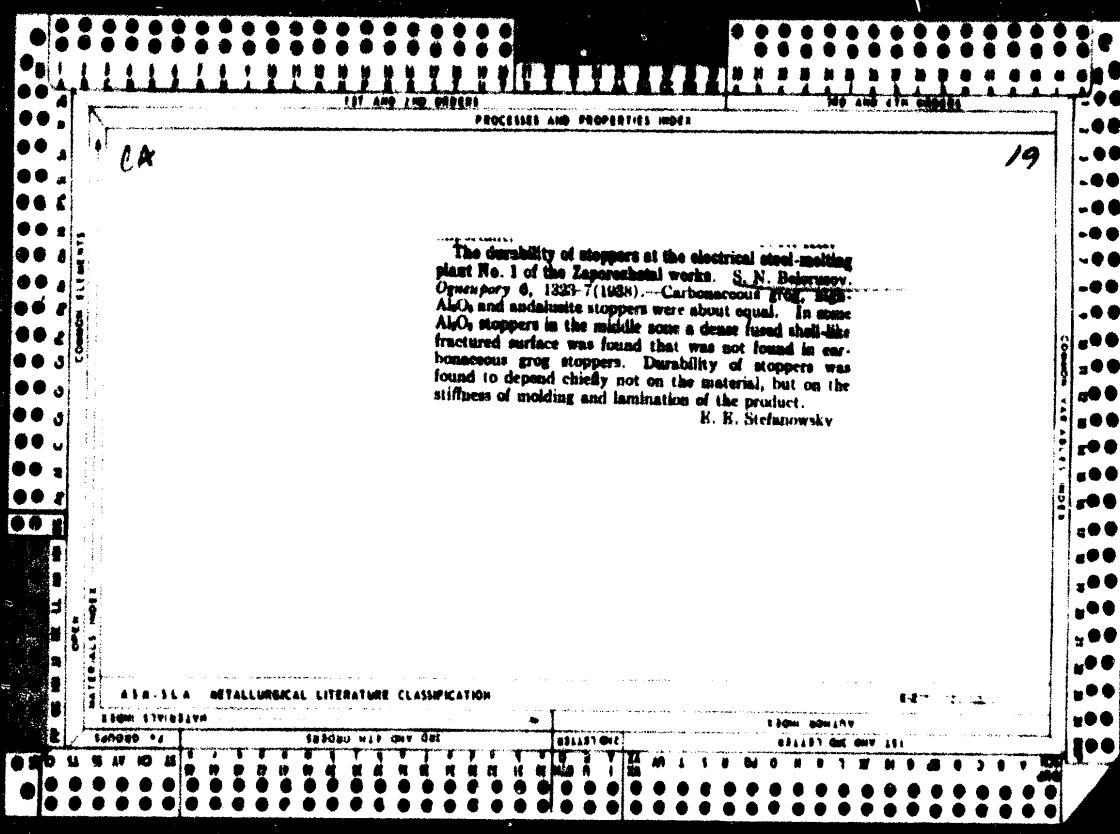
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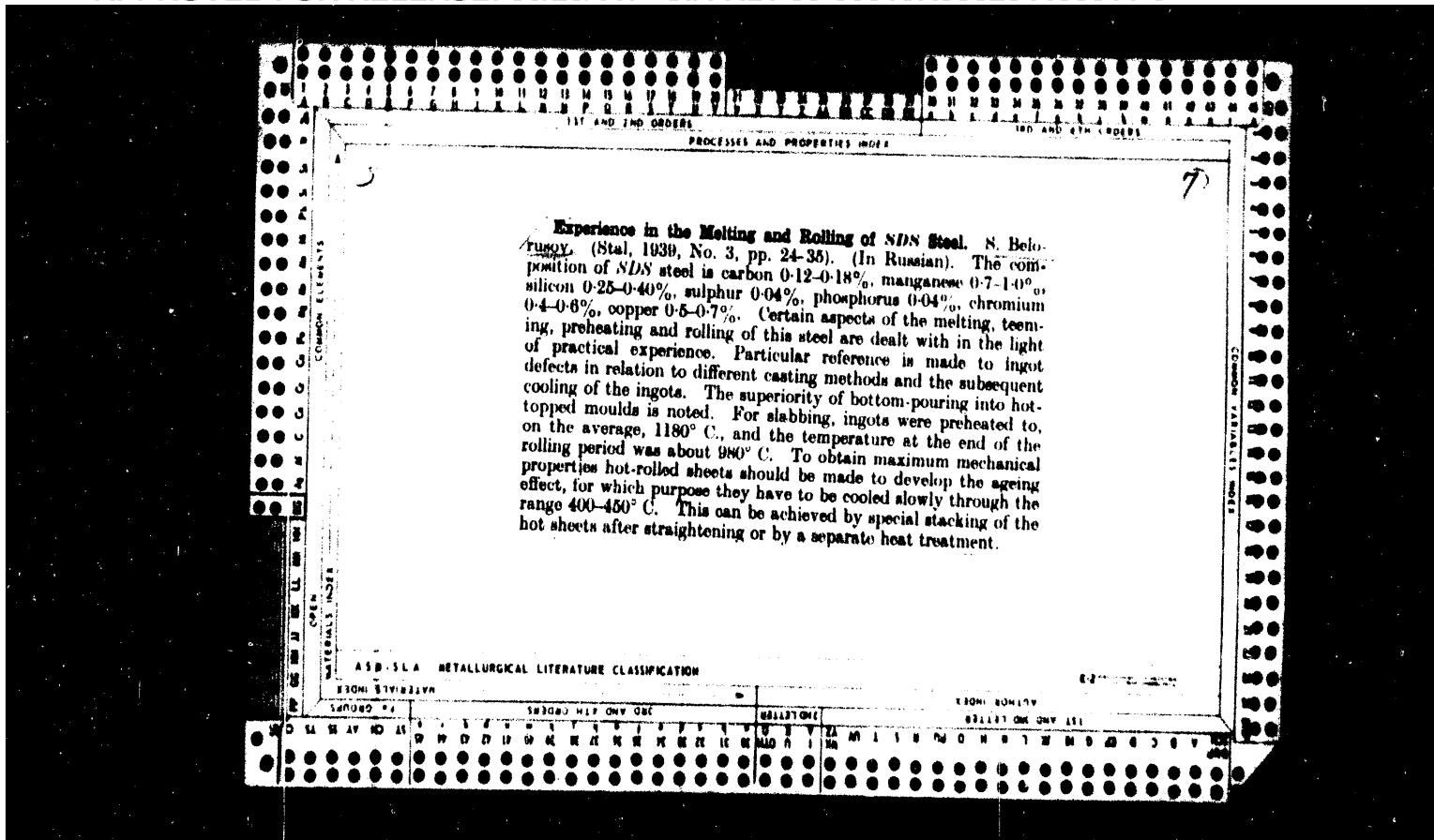
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12

EXPERIMENTAL ROLLING OF SHEET FROM LARGE STAINLESS-STEEL INGOTS.  
D. Gurevich and S. Belorusov. (Stal, 1959, No. 10-11, pp. 49-52).  
(In Russian). The authors report on an investigation of the possibility of rolling sheets from 10-ton ingots of stainless steel. Two ingots of 18/8 stainless steel were prepared from two heats. Their weights were 9.5 and 10.3 tons, respectively. The ingots were first rolled into slabs and then down to sheet in a continuous sheet mill. Details are given regarding the surface state of the ingots, their preheating, and of the rolling in the slab and sheet mills. An examination of the macrostructure of the slabs was made. Chemical analysis of the slabs showed that segregation in the 10-ton stainless-steel ingots was negligible. It is concluded that the rolling of 10-ton ingots into sheet is feasible. Such ingots should be heated to 1170-1180° C. for rolling into slabs. The temperature at the end of the slab-rolling process should not be lower than 900° C. The slabs should be heated to 1200-1230° C. for rolling into sheet.

## ASB-1A METALLURGICAL LITERATURE CLASSIFICATION

100% STEREOVIEW

100% STEREOVIEW

100% STEREOVIEW

100% STEREOVIEW

100% STEREOVIEW

ОПЫТ РАБОТЫ СЕМЕНТИНУЮЩИХ МАССАМИ

137-148-3-4978

Translation from: Referatnyy zhurnal Metallurgiya 1958, Nr 5, p 73 (USSR)

AUTHOR: Belorusov, S. N.

TITLE: Operation of a Semicontinuous Thin-sheet Hot-rolling Mill, and of a Continuous Cold-rolling Mill at the Novosibirsk Metallurgical Plant. (Opyt raboty po semeintinuyushchim massam na stana goryachey prokatki i nejpreryvnoy stana khodnoy prokatki na Novosibirskom metalloburgocheskem zavode)

PERIODICAL: Tr. Nauchno-tehnicheskogo cheloveg metallurgii 1956, Vol 10, pp 521-530

ABSTRACT: A description of the operation of a semicontinuous model-810 rolling mill, employed in rolling a 3-15 mm thick and 710-300 mm wide strip of cold-drawn steel, and consisting of a stand (S) equipped with vertical rolls (R) 734 mm in diameter, a reversible tetrapod S with  $R = 1016$  mm in diameter and 812 mm long, and three four-roll finishing S's of the continuous type, with driving  $R = 520$  mm in diameter and 810 mm long, and the supporting  $R = 1010$  mm in diameter and 740 mm long. Two roll-type reeling units operate in conjunction with the mill. In order to increase the productivity  $P_3$  of the mill, the output

Card 1/3

137-1958-3-4978

'Operation of a Semicontinuous Threешет Hot-rolling Mill (cont.)

and the rate of rolling are checked hourly. The number of passes through the two-roll S is reduced from 7 to 5 (when rolling strips of low- and medium-carbon steel not exceeding 600 mm in width) and the productivity of the continuous furnaces is increased. The tempo of the rolling process is increased by passing two slabs in succession through the R's. Time losses connected with the replacement of R's were reduced by employing the more durable twin-layer R's. As a result of organizational and technical steps undertaken, the post-war output of the mills exceeded the planned output by 25 percent. The three-stand four-roller continuous mill employed in cold rolling of a 300 mm to 640 mm wide strip is equipped with 740-mm long driving R's 50 mm in diameter and 740-mm long backing R's 1010 mm in diameter. Each S is powered by a 736 kw motor operating at 400-800 rpm. The speed of the rolling process in the last S is 1.87-3.74 m/sec. In order to increase the P of the rolling mill the rating of the motors operating the pressure clamping screws was increased from 18 kw to 23.2 kw, which resulted in greater reductions. Owing to insufficient tightness of the metal on the roll and the lack of a releasable clutch on the unwinding unit no rear tension can be employed.

Card 2/3

137-1958-3-4978

'Operation of a Semicontinuous Thinnest Sheet Hot-rolling Mill (cont.)

when the metal is rolled in the first S; the shaft of the reeling unit was strengthened and the helical gears were replaced by the herringbone type thus permitting to increase the forward tension. As a result of these modifications the post-war productivity of the mill increased from 18.4 ton/hr to 21.5 ton/hr.  
Ref. RzhMet 1957 Nr 17 23684

S. G.

Card 3/3

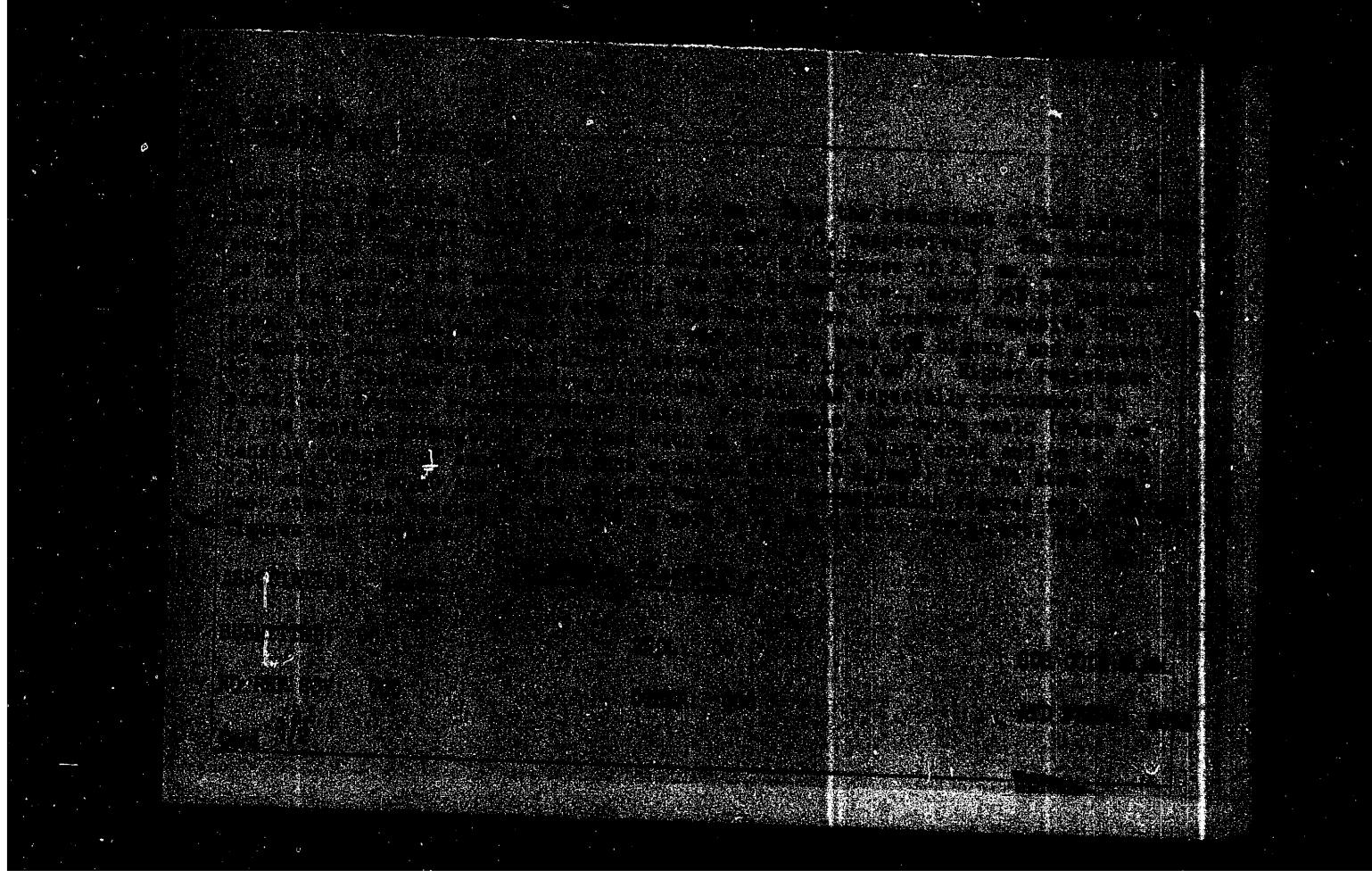
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TSIICHM no. 3:39-40 '61. (MIRA 14:12)

1. Novosibirskiy metallurgicheskiy zavod.  
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APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000204400011-6

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APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000204400011-6

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15318\* (Use of Flotation in the Testing of Pharmaceutical Preparations for Salts of Heavy Metals, Iron, and Zinc.)  
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merzel. AN SSSR 19:44-54 '62. (MIRA 16:1)

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Using a tensometric bridge converter in the oscillographic recording of a dynamic process. Zav.lab. 22 no.6:746-747 '56.(MLRA 9:8)

1. Odesskiy gidrotekhnicheskiy institut.  
(Electric measurements) (Oscillograph) (Strain gauges)

Polygraphed

Subject : USSR/Aeronautics - Aircraft (gliders) AID P - 4463  
Card 1/1 Pub. 58 - 10/10  
Author : Belorussov, L., Monitor, Circle for the Study of Aerodynamics, Moscow Institute of Technology of Aviation, Moscow.  
Title : Study of the Aerodynamic Properties of Profiles of the Types of Gliders Actually Used in the USSR.  
Periodical : Kryl. rod., 1, 20-22, Ja 1956  
Abstract : A discussion of the aerodynamic properties of various types of glider wings, on the basis of data obtained at the wind tunnel T-1 of the Moscow Institute of Technology of Aviation. Three graphs, 1 diagram, 1 photo and 1 table. Reference is made to the articles on the computation of aerodynamic qualities of glider models by I. Kostenko, published in Kryl. rod., Nos. 8, 11 and 12, 1953.  
Institution : Moscow Institute of Technology of Aviation, Moscow ("MATI")  
Submitted : No date

BELORUSSOV, L.

Subject : USSR/Aeronautics - Aerodynamics AID P - 4674  
Card 1/1 Pub. 58 - 14/14  
Authors : Blinov, B., Engineer; Vasil'yev, A. and Pesoch, V., Model-builders, Students of the Moscow Aviation Institute (MAI); Belorussov, L., Monitor of the Aerodynamic Circle of the Moscow Institute for Technology of Aviation (MATI).  
Title : An inadequate book  
Periodical : Kryl. rod., 3, 23, Mr 1956  
Abstract : Highly specialized discussion of the shortcomings of O. Gayevskiy's book "Flying Glider Models" on the aerodynamic properties of aircraft models (publishing house "DOSAAF").  
Institution : None  
Submitted : No date

Belorussov L.

85-58-5-30/38

AUTHOR: Belorussov, L.

TITLE: To Aid the Model-airplane Builder Participating in the All-Union Spartacus Games (V pomoshch' aviamodelistu-uchastniku vsesoyuznoy spartakiady); Wing Profiles for Rubber-motor Airplane Models (Profili kryl'yev dlya rezinomotornykh modeley samoletov)

PERIODICAL: Kryl'ya rodiny, 1958, Nr 5, pp 30-31 (USSR)

ABSTRACT: The author gives detailed instructions for selecting the proper wing profiles for rubber-motor models. Personalities mentioned include Soviet engineers I. Kostenko and M. Kupfer, designers of new wing profiles. There are 4 drawings and 2 tables.

AVAILABLE: Library of Congress

Card 1/1

1. Aviation - USSR
2. Airplanes - Models
3. Wings - Selection

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KELORUSSOV, L.

Design of wings for airplane models with elastic motors. Kryl. rod.  
9 no.5:30-31 My '58. (MIRA 11:6)  
(Airplanes--Models)

BELORUSSOV, L., inzh.

Propeller for a rubber-motor model. Kryl.rod. 14 no.3 Insert  
10-15 Mr '63.  
(Airplanes—Models) (MIRA 16:4)

ARDENTOV, I.N.; BELORUSSOV, L.M.; IVANOVA, V.N.; CHISTYKOV, V.A.; BELOV, M.,  
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[Soligalich] Soligalich. By I.N. Ardentov i dr. Kostroma, Kostromskoe  
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Longitudinal balancing and stability of a free flying  
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BELURUSOV, N. I.  
DETOMPKV, N. I.

PA 15734

"USSR Electricity - Cable Industry Cables, Electric

"Achievements and Tasks of the Cable Industry," Ye. P. Kabanov, Eng., Stalin  
Price Laureate, N. I. Belurusov, Eng., Glavkabel', Min. of Elec. Ind., 1955

"Vest Elektro-Prog" No 1

Lists landmarks in history of USSR cable industry. Discusses manufacture of  
bare cables, power cables with paper insulation, ceramic cables, rubber  
insulated wires and cables and winding equipment. Includes four figures.

PA 15734

BELORUSSOV, N.I.

PHASE I

BOOK

Call No.: TK3351.B44

Author: Belorussov, N.I., and Grodnev, I.I.

Full Title: RADIO FREQUENCY CABLES

Transliterated Title: Radiochastotnye kabeli

Publishing Data

Originating Agency: None.

Publishing House: State Power Publishing House.

Date: 1952

No. pp.: 272

No. of copies: 7,000

Editorial Staff

Editor: None.

Ed.-in-Chief: None.

Tech. Ed.: None.

Appraiser: None.

Text Data

Coverage: The work treats the principles, theory, design, and construction of coaxial and symmetrical radio frequency cables. Several chapters are devoted to materials, technology, and testing methods used in manufacturing radio frequency cables. Drawings, photographs, and tables. Subject index.

Purpose: A textbook for students of communication; and, a handbook for radio technicians.

Facilities:

No. of References: 15.

Available: Library of Congress.